

# NDIA SECURITY DIVISION

## THERMAL IMAGING: TRANSITION TO HOMELAND SECURITY

Presented By  
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26 JUNE 2002

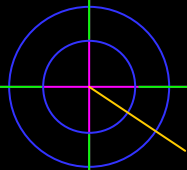


# PRESENTATION OUTLINE

- WHO IS FLIR Systems, Inc.
- EXISTING DoD

## PROGRAMS / SYSTEMS

- HOMELAND OPPORTUNITIES
- LESSONS LEARNED
- TRANSITION CHALLENGES



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# FACILITIES & PEOPLE

**FLIR employs 800 people worldwide to design, manufacture and market thermal imaging and broadcast camera systems for a broad spectrum of applications.**

**PORTLAND**



**BOSTON**



**SWEDEN**



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# MARKETS



## IMAGING

*Saves Lives*

- Security
- Search & Rescue
- Mission Critical Technology
- Procurement Reform



## THERMOGRAPHY

*Saves Energy*

- Predictive & Preventative Maintenance
- Improves Manufacturing Efficiency
- Price/Cost (Uncooled Technology)

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# IMAGING

**AIRBORNE**



**MARITIME**



**GROUND**



**SECURITY**



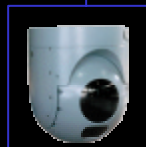
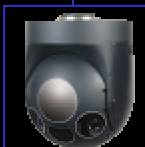
**FIRE FIGHTING**



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# BROAD SPECTRUM

## AIRBORNE



## GROUND



## MARITIME



## THERMOGRAPHY



## FIRE



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# AIRBORNE SYSTEMS

Since 1978 FLIR has led and shaped the airborne imaging market with a wide array of systems for a variety of applications.



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# MARITIME SYSTEMS

**Military, government and commercial maritime entities count on FLIR products for missions including self-protection, search and rescue, drug interdiction, counter terrorism and navigation.**



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# GROUND SYSTEMS

**FLIR has a solution for virtually every critical ground based application including force protection, surveillance, border patrol, perimeter security and special operations.**



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# GROUND PLATFORMS



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# ThermoVision Sentry

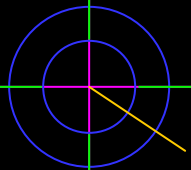
**ThermoVision Sentry's integrated pan and tilt continuous 360° slewing is ideal for mobile or fixed-installation thermal and daylight surveillance.**

- Uncooled InSb 320 x 240 FPA
- Dual sensor IR/CCD TV
- Networkable
- Continuous 360° rotation
- Programmable



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# SENTRY VIDEO



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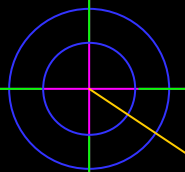


# AIR FORCE TASS PROGRAM



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# NBC NIGHTLINE



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# SENTRY AT SALEM NUCLEAR PLANT



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# ThermoVision Sentry POD

**Sentry Personnel Observation Device** provides reliable, continuous infrared and daylight surveillance in an affordable, sealed, easy to use and integrate camera system.

- Uncooled microbolometer detector
- Continuous 4:1 digital zoom
- RS-232 connection
- Dual sensor IR/CCDTV
- Auto focus/gain/uniformity



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# ThermoVision Ranger

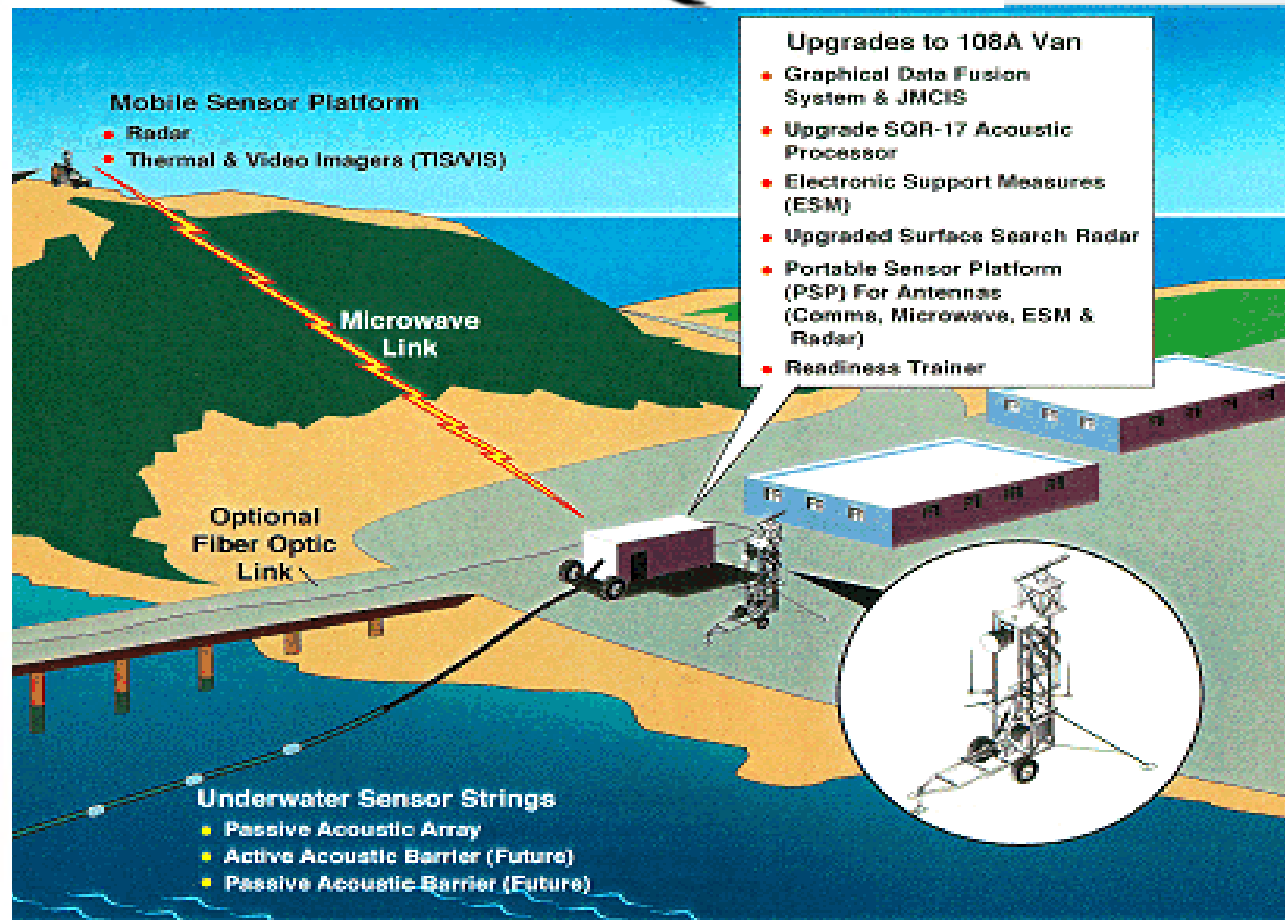
**ThermoVision Ranger provides unparalleled long-range thermal imaging (vehicles in excess of 9 km with detailed recognition to 3 km). Ranger integrates into fixed and mobile systems.**

- Vehicle & stationary flexible mount
- Dual field of view 100/500 mm telescope
- MIL-STD 810
- Multi-sensor compatible
- RS-232 port/interface



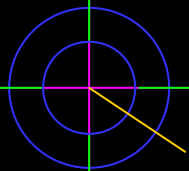
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# MIUW THERMAL UPGRADE



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# RANGER VIDEO



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# INS / BORDER PATROL



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# ThermoVision 2000

**ThermoVision 2000, long-range platform-mounted thermal imaging system uses a Gen-III QWIP sensor for high thermal sensitivity in both warm and cold climates.**

- 3 fields of views
- 10+ km operating range
- Gen-III QWIP sensor
- Networkable
- Mobile & field



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# T-2000 WIDE FOV



**FLIR**  
SYSTEMS

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**FLIR**  
SYSTEMS

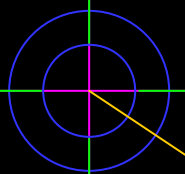


# T-2000 MID FOV



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# T-2000 NARROW FOV

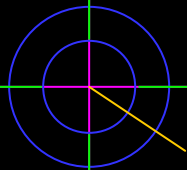


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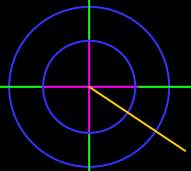
# HOMELAND OPPORTUNITIES

- **Oil Refineries/ Pipelines**
- **Waterside / Port Security**
- **Airport Physical Security**
- **Nuclear Power Plants**
- **Bridges and Tunnels**
- **Dams and Reservoirs**
- **Any High Value Asset**



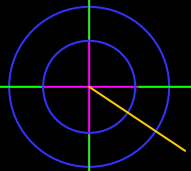
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# LESSONS LEARNED



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# TRANSITION CHALLENGES



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# SECURITY SYSTEMS

**FLIR offers an unparalleled range of high-performance systems for industrial security applications. Security managers now have access to military technology designed specifically for industrial users.**



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